

What is claimed is:

- 1           1.     A method for evaluating degradation of an electrical signal caused by a circuit  
2 comprising the steps of:
- 3           (a)     placing a first electrical signal in communication with an input of the circuit;
- 4           (b)     passing said first electrical signal through the circuit thereby causing the circuit to  
5 output a degraded electrical signal;
- 6           (c)     providing a means of synchronizing and combining electrical signals having at least  
7 a first and a second input and one output, placing said degraded electrical signal in communication  
8 with the first input of said means of synchronizing and combining electrical signals;
- 9           (d)     placing a second electrical signal, substantially identical to said first electrical  
10 signal, in communication with the second input of said means of synchronizing and combining  
11 electrical signals;
- 12           (e)     placing the output of said means of synchronizing and combining electrical signals  
13 in communication with a plurality of means for creating visual representations of electrical signals  
14 in a way that the visual representation of said degraded electrical signal and the visual  
15 representation of said second electrical signal are presented separate from each other and each  
16 representation is not altered by the representation of any other signal; and
- 17           (f)     comparing said visual representation of said degraded image and said visual  
18 representation of said second electrical signal.

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1           2.     A method for evaluating the degradation of an electrical signal caused by a circuit  
2 as recited in claim 1 wherein one of the plurality of means for creating visual representations  
3 recited in step e is an oscilloscope.

1           3.     A method for evaluating the degradation of an electrical signal caused by a circuit  
2 as recited in claim 1, in which the electrical signal further comprises a video signal.

1           4.     A method for evaluating for the degradation of an electrical signal caused by a  
2 circuit as recited in claim 1, in which the video signal further comprises a signal selected from a  
3 group consisting of NTSC, PAL, SECAM, or video signals generated by a computer.

5           5.     A method for evaluating and compensating for degradation of an electrical signal  
6 caused by a circuit comprising the steps of:  
7           (a)     placing a first electrical signal in communication with an input of the circuit;  
8           (b)     passing said first test signal through the circuit thereby causing the circuit to  
9 output a degraded electrical signal;  
10           (c)     providing an electrical compensation means having an input, an output, and  
11 adjustment controls, placing said degraded electrical signal in communication with the input of  
12 said electrical compensation means;  
13           (d)     providing a means of synchronizing and combining electrical signals having at least  
14 a first and a second input and one output, placing the output of said electrical compensation  
15 means in communication with the first input of said means of synchronizing and combining  
16 electrical signals;

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(e) placing a second electrical signal, substantially identical to said first electrical signal, in communication with the second input of said means of synchronizing and combining electrical signals;

(f) placing the output of said means of synchronizing and combining electrical signals in communication with a means for creating visual representations of electrical signals in a way that the visual representation of said degraded electrical signal and the visual representation of said second electrical signal are presented separate from each other and each representation is not altered by the representation of any other signals;

(g) comparing said visual representation of said degraded image and the visual representation of said second electrical signal; and

(h) Altering said adjustment controls of said compensation means so that the visual representation of said degraded signal is modified to resemble as closely as possible the visual representation of said second electrical signal.

6. A method for evaluating and compensating for degradation of an electrical signal caused by a circuit comprising the steps of:

(a) placing a first electrical signal in communication with an input of the circuit;

(b) passing said first test signal through the circuit thereby causing the circuit to output a degraded electrical signal;

(c) providing a signal splitting means having an input and at least a first and a second output, placing said degraded signal in communication with the input to said video splitting means;

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(d) providing a means of synchronizing and combining electrical signals having at least a first, a second, and a third input, and one output, placing the first output of said video splitting means in communication with the first input of said means of synchronizing and combining electrical signals;

(e) providing a signal compensation means having an input, an output, and adjustment controls, placing the second output of said signal splitting means in communication with the input of said electrical compensation means whereby a recovered electrical signal is produced;

(f) placing the output of said electrical compensation means in communication with the second input of said means of synchronizing and combining electrical signals;

(g) placing a second electrical signal, substantially identical to said first electrical signal, in communication with the third input of said means of synchronizing and combining electrical signals;

(h) placing the output of said means of synchronizing and combining electrical signals in communication with a means for creating visual representations of electrical signals in a way that the visual representation of the first input, the second input and the third input of said means of synchronizing and combining electrical signals are presented separate from each other and each representation is not altered by the representation of the other two;

(i) comparing said visual representation of said degraded signal, said visual representation of said recovered signal, and the visual representation of said second electrical signal; and,



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15 said degraded signal, in electrical communication with said input of said signal compensation  
16 means;

17 (f) passing said degraded signal through the signal compensation means thereby  
18 generating a recovered electrical signal;

19 (g) placing the output of said signal compensation means, which is conducting said  
20 recovered electrical signal, in communication with the second input of said signal combining  
21 means.

22 (i) placing the output of said signal combining means in communication with a  
23 plurality of means for creating visual representations of electrical signals in a way that the visual  
24 representation of said degraded electrical signal and the visual representation of said recovered  
25 electrical signal are presented separate from each other and each representation is not altered by  
26 the representation of any other signals.

27 (j) adjusting said recovered electrical signal with adjustment means of said signal  
28 compensation means while comparing concurrently said visual representation of said recovered  
29 electrical signal to said visual representation of said degraded electrical signal.

1 9. A method for evaluating and compensating for the degradation of an electrical signal  
2 caused by a circuit as recited in Claim 8, wherein one of the plurality of means for creating visual  
3 representations recited in said placing step g, is an oscilloscope.

1 10. A method for evaluating and compensating for the degradation of an electrical signal  
2 caused by a circuit as recited in claim 8, in which the electrical signal further comprises a video  
3 signal.

11. A method for evaluating and compensating for the degradation of an electrical signal caused by a circuit as recited in claim 8, in which the video signal further comprises a signal selected from a group consisting of NTSC, PAL, SECAM, and video signals generated by computers or any other means.

5 3 12. A method for evaluating and compensating for the degradation of an electrical signal caused by a circuit as recited in claim 1, wherein one of the plurality of means for creating visual representations recited in step f is an oscilloscope.

14 13. A method for evaluating and compensating for the degradation of an electrical signal caused by a circuit as recited in claim 1, in which the electrical signal further comprises a video signal.

10 5 14. A method for evaluating and compensating for the degradation of an electrical signal caused by a circuit as recited in claim 1, in which the video signal further comprises a signal selected from a group consisting of NTSC, PAL, SECAM, and video signals generated by a computer.

15 6 15. A method for evaluating the degradation of an electrical signal caused by a circuit as recited in Claim 1, wherein the placing step, as described in step (e), further comprises a means for adjusting each of the said visual representations so that each of the said visual representations can be displayed in a plurality of sizes, shapes and locations.